

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re: Hanafy Meleis

Examiner: Dhairya A. Patel

Serial No.: 09/910,555

Group Art Unit: 2151

Filed: July 20, 2001

Confirmation No.: 3472

For: NETWORK MODELS, METHODS, AND COMPUTER PROGRAM PRODUCTS FOR  
MANAGING A SERVICE INDEPENDENT OF THE UNDERLYING NETWORK  
TECHNOLOGY

Date: March 12, 2007

Mail Stop Appeal Brief - Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**APPELLANT'S REPLY BRIEF ON APPEAL UNDER 37 C.F.R. §41.41**

Sir:

This Reply Brief is filed in response to the Examiner's Answer mailed January 12, 2007 (hereinafter Examiner's Answer).

It is not believed that an extension of time and/or additional fee(s) are required, beyond those that may otherwise be provided for in documents accompanying this paper. In the event, however, that an extension of time is necessary to allow consideration of this paper, such an extension is hereby petitioned for under 37 C.F.R. §1.136(a). Any additional fees believed to be due in connection with this paper may be charged to Deposit Account No. 50-0220.

**I. The Examiner's Answer – Response to Argument**

Appellant will refrain herein from readdressing all of the deficiencies with the pending rejections and, therefore, in the interest of brevity, Appellant hereby incorporates herein the arguments set out in Appellant's Supplemental Brief on Appeal mailed October 3, 2006 as if set forth in their entirety. Accordingly, Appellant will only address new arguments made in the Examiner's Answer.

On page 4 and in the "Response to Argument" section on page 11, the Examiner's Answer attempts to rebut Appellant's assertion that the point of presence (POP) element 42 of FIGS. 2 – 4 of Li is not a gateway as recited in independent Claim 1, for example. In particular, the Examiner's Answer cites col. 6, lines 13 - 20 of Li as describing the POP element 42 as a gateway. This passage states:

A typical POP contains a distribution router 62 connected to a local area network 64 that distributes information among various servers and various hardware interfaces for outside communication to Internet customers. A wide variety of servers may be present within the POP. By way of example, the POP includes an e-mail server 66, a world wide web server 68 and other servers 70 such as a DNS server, news server, etc. (Li, col. 6, lines 13 – 20).

Appellant submits that nowhere in the foregoing passage does Li disclose or suggest that the POP element 42 may be a gateway that performs protocol translation on traffic passing therethrough as recited in independent Claim 1, for example. Simply routing or distributing traffic is not sufficient to qualify as gateway functionality. The Examiner's Answer states "an access point's functionality is similar as gateway that is to provide communication between users and perform protocol translation on traffic passing between networks." Appellant submits that this is a mischaracterization of the functionality of a point of presence. The terms "gateway" and "POP" are terms of art in the field of networking and are used to describe nodes in a communication network that perform a specific function. In more detail, the term "gateway" is defined in the Microsoft Press Computer Dictionary, Third Edition as "[a] device that connects networks using different communication protocols so that information can be passed from one to the other. A gateway both transfers information and **converts** it to a form compatible with the protocols used by the receiving network. (Emphasis added). The term POP is defined in the Microsoft Press Computer Dictionary, Third Edition as "[a] point in a wide area network to which a user can connect with a local telephone call." Based on the above definitions, Appellant submits that there is a clear difference between a gateway and a POP. A gateway does more than just route information between two networks, it also converts the information to a form compatible with a receiving network. This functionality of a plurality of gateways is recited in Claim 1, for example, with the recitation "configured to perform protocol translation on traffic

passing between the coupled wholesale service domains." In sharp contrast, the term POP is used to identify an access point for a network and does not indicate that the device provides any protocol translation or information conversion.

The Examiner's answer cites paragraph 25 of the publication of the present application for the proposition that Appellant has equated the terms "gateway" and "POP." Specifically, the Examiner's Answer states "Examiner would also like to point to the specification for the applicant's invention in Paragraph 25, which states that gateways devices in accordance with embodiments of the present invention may be called 'points of presence (POPs).'" (Examiner's Answer, page 12). Appellant submits that this is an incomplete statement of the description in paragraph 25 of the published application. This paragraph states that gateway (GW) devices "may be called 'service switches' or 'service points of presence (POPs).'" (Published Application, paragraph 25). As discussed above, in the context of the Internet, a POP is an access point from one place to the rest of the Internet. As explained in detail in paragraph 25 of the Published Application, a gateway is used to translate between protocols used by different domains. As each domain may be used to provide different services, a gateway device may be viewed as a service POP. That is, a gateway may be an access point to a new service. A conventional POP as described in Li, however, is not a gateway because the POP described in Li does not perform protocol translation.

Turning next to the "Response to Argument" section on page 13, the Examiner's Answer alleges that the DNS server shown in FIG. 6 of Li corresponds to "a process domain that provides an abstract representation of applications" as recited in Claim 1, for example. For additional support, the Examiner's Answer cited paragraph 26 of the Published Application, which cites a DNS as an example of an abstract representation of an application. (Examiner's Answer, page 13). As explained on page 8 of Appellant's Supplemental Brief on Appeal, Appellant does not dispute that Li discloses various applications, such as an email, FTP, DNS, DHCP, etc. in FIG. 6. Appellant submits, however, that these applications are not "abstract representations of applications" as recited in Claim 1, but are, in fact, the actual applications used to provide the particular services. Appellant notes that paragraph 26 of the Published Application does not state that the DNS service is an abstract representation of an application, but instead explains that DNS is an example of an application that may be represented abstractly

through a process domain. Claim 1 is directed to a model for managing a service. This model uses a process domain that provides an abstract representation of applications provided by an end service domain. FIG. 6 of Li is the architectural diagram of a device used to actually access the Internet. The applications shown in FIG. 6 are not abstract representations, but are the actual applications used to access the Internet.

Turning next to the “Response to Argument” section on pages 14 and 15, the Examiner’s Answer continues to maintain that the various software components shown in FIG. 6 of Li for an Internet access device correspond to “a plurality of software objects that represent resources in the end service domain for providing the service” as recited, for example, in Claim 1. Appellant respectfully submits that the analysis provided in the Examiner’s Answer and in previous Office Actions fails to take into account the word “represent” in the recitation reproduced above. As highlighted on page 8 of Appellant’s Supplemental Brief on Appeal, the software modules shown in FIG. 6 of Li for the Internet access device 100 are not representations of resources in another entity, such as an end service domain, but are instead software components used to provide functionality and operability for the Internet access device 100. Note that the language of Claim 1 states that the plurality of software objects are part of the service management system. These software objects represent resources not in the service management system, but in an end service domain.

Turning next to the “Response to Argument” section on pages 16 and 17, Appellant respectfully refers to the discussion provided on page 9 of Appellant’s Supplemental Brief on Appeal. Appellant would, however, like to respond to the statement at the bottom of page 16 and top of page 17 in the Examiner’s Answer, which states: “Examiner would like to point that nowhere in the claim language does the applicant specify as what are the rules that associate requirements of a service, which are associated with the network element. The claim language states a policy database tat (sic) comprises rules for associating requirements of service with resources in the end service domain.” Appellant agrees that the Claim 1 recites “a policy database that comprises rules for associating requirements of the service with resources in the end service domain.” The reason that Appellant stated “Bahlman does not appear to include any disclosure or suggestion that central policy database 12 further includes rules in which requirements of a service are associated with the network element” in Appellant’s Supplemental

In re: Hanafy Meleis  
Serial No.: 09/910,555  
Filed: July 20, 2001  
Page 5 of 5

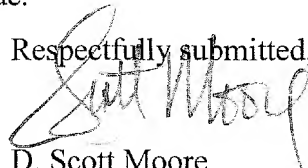
Brief on Appeal is because that is the language used in the Final Office Action of April 3, 2005 (hereinafter "Final Action"). Specifically, the Final Action states "Bahlman clearly teaches having business rules and policies which describes the control and the infrastructure (components) in a real database for the infrastructure elements." (Final Action, page 9; emphasis added). Thus, the Final Action appears to allege that infrastructure elements correspond to the resources in the end service domain as recited in Claim 1. Appellant explains on page 9 of Appellant's Supplemental Brief on Appeal how even if infrastructure elements or network elements are assumed to correspond to resources in an end service domain, the central policy database 12 of Bahlman fails to include rules that associate requirements of a service with infrastructure elements of network elements. Instead, the central policy database 12 appears to include only technical configurations and policies that are used for provisioning.

Thus, Appellant submits that the cited references fail to disclose or suggest the recitations of independent Claims 1, 6, 13, and 20 for the reasons discussed herein and in Appellant's previously submitted Supplemental Brief on Appeal. Accordingly, Appellant respectfully request reversal of the rejections of Claims 1, 3 - 6, 8 - 13, 15 - 20, and 22 - 26 for at least these additional reasons.

## II. Conclusion

For at least the reasons set forth in above and in Appellant's Supplemental Brief on Appeal, Appellant requests reversal of the rejections of the pending claims, allowance of the pending claims, and passing of the application to issue.

Respectfully submitted,

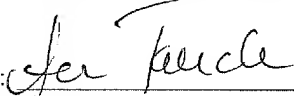


D. Scott Moore  
Registration No. 42,011

**Customer No. 20792**  
Myers Bigel Sibley & Sajovec, P.A.  
P. O. Box 37428  
Raleigh, North Carolina 27627  
Telephone: (919) 854-1400  
Facsimile: (919) 854-1401

### CERTIFICATION OF TRANSMISSION

I hereby certify that this correspondence is being transmitted via the Office electronic filing system in accordance with § 1.6(a)(4) to the U.S. Patent and Trademark Office on March 12, 2007

Signature:   
Amelia Tauchen